West Virginia Department of Environmental Protection Division of Air Quality

Fact Sheet



For Final Minor Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to the Minor Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on November 21, 2016.

Permit Number: **R30-03900663-2016**

Application Received: **December 13, 2017 (MM06)**

Plant Identification Number: 039-00663

Permittee: **Optima Belle LLC**Facility Name: **Belle Plant**

Mailing Address: 901 W DuPont Avenue, Belle WV, 25015

Permit Action Number: MM06 Revised: July 3, 2018

Physical Location: Belle, Kanawha County, West Virginia

UTM Coordinates: 451.90 km Easting • 4,232.60 km Northing • Zone 17

Directions: US Route 60 exit, then right onto Dupont Avenue, then left at plant gate.

Facility Description

Manufacture of various organic and specialty chemicals

SIC Codes: 2869; 2879

Emissions Summary

MM06:

Table 1 – Emissions Summary Operating Scenario Changes: Dried LAME

Emission	Pollutant	R13-0882P	R13-0882P	R13-0882Q	R13-0882Q	Change	Change
Point ID		Emissions	Emissions	Emissions	Emissions	(lbs/hr)	(TPY)
		(lbs/hr)	(TPY)	(lbs/hr)	(TPY)		
104.014	VOC	0.43	0.04	0.51	0.04	+ 0.08	None
104.014	Acetonitrile	0.02	0.01	0.01	0.01	- 0.01	None
104.014	Methanol	0.02	0.01	0.12	0.03	+ 0.10	+ 0.02
104.014	Methyl Tert-	0.39	0.02	0.38	0.01	- 0.01	- 0.01
	Butyl Ether						

Table 2 – Emissions Summary Operating Scenario Changes: STPB

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Emission	Pollutant	R13-0882P	R13-0882P	R13-0882Q	R13-0882Q	Change	Change
Point ID		Emissions	Emissions	Emissions	Emissions	(lbs/hr)	(TPY)
		(lbs/hr)	(TPY)	(lbs/hr)	(TPY)		
104.014	VOC	2.85	0.08	1.17	0.15	- 1.68	+ 0.07
104.014	Chlorobenzene	0.01	0.01	None	None	-0.01	- 0.01
104.014	Hexane	0.87	0.02	0.43	0.04	- 0.44	+ 0.02
104.014	Toluene	0.09	0.01	0.39	0.05	+ 0.30	+ 0.04

Table 3 – Emissions Summary Operating Scenario Changes: TMBX

Emission	Pollutant	R13-0882P	R13-0882P	R13-0882Q	R13-0882Q	Change	Change
Point ID		Emissions	Emissions	Emissions	Emissions	(lbs/hr)	(TPY)
		(lbs/hr)	(TPY)	(lbs/hr)	(TPY)		
107.022	PM	New	New	0.80	0.05	+ 0.80	+ 0.05
104.014	VOC	New	New	5.37	0.57	+ 5.37	+ 0.57

Table 4 – Emissions Summary Operating Scenario Changes: Nylon Washing

Emission	Pollutant	R13-0882P	R13-0882P	R13-0882Q	R13-0882Q	Change	Change
Point ID		Emissions	Emissions	Emissions	Emissions	(lbs/hr)	(TPY)
		(lbs/hr)	(TPY)	(lbs/hr)	(TPY)		
104.014	VOC	New	New	0.59	0.18	+ 0.59	+ 0.18
104.014	Methanol	New	New	0.59	0.18	+ 0.59	+ 0.18

Table 5: Total Emission Changes

Tueste C. Total Emission Change		
Pollutant	Change	Change
	(lbs/hr)	(TPY)
PM	+ 0.80	+ 0.05
VOC	+ 4.36	+ 0.82
Acetonitrile	- 0.01	None
Methanol	+ 0.69	+ 0.20
Methyl Tert-Butyl Ether	- 0.01	- 0.01
Chlorobenzene	- 0.01	- 0.01
Hexane	- 0.44	+ 0.02
Toluene	+ 0.30	+ 0.04
Total HAPs	+1.21	+ 0.44

Title V Program Applicability Basis

With the proposed changes associated with this permitting action, this facility maintains the facility-wide potential to emit over 10 tons per year of a single HAP. Therefore, Optima Belle is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State: 45CSR6 Particulate Matter From Combustion

45CSR7 Particulate Matter From Manufacturing

Processes

45CSR13	Permits for construction, modification,
	relocation, etc.
45CSR30	Operating permit requirement.

State Only: None

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or	Date of	Permit Determinations or Amendments That
Consent Order Number	Issuance	Affect the Permit (if any)
R13-0882Q	February 16, 2018	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B, which may be downloaded from DAQ's website.

Determinations and Justifications

MM06 changes due to R13-0882Q

- 1. Updated the Permit Number to R13-0882Q in Section 1.2.
- 2. In Condition 3.1.10, added R13-0882Q.
- 3. Added a Filter Dryer (236), Reactor #10 (237), and Reactor #10 condenser (237C) to the equipment table.
- 4. Increased the number of batches of dried LAME and from 20 to 40 per calendar year in Condition 4.1.2.9.2 as well as requiring Scrubber (003) to be used for any reactor generating acid gases. Added sources 108, 236, 237, and 237C and revised the emission limits in Condition 4.1.2.9.4. Also removed a batch limit for undried LAME in Condition 4.1.2.9.2 which is already listed in Condition 4.1.2.10.2 and removed a batch limit for dried LAME in Condition 4.1.2.10.2 which is already listed in Condition 4.1.2.9.2.
- 5. Added a requirement to limit the total number of batches of STPB to 30 batches per calendar year in Condition 4.1.2.8.2. Added sources 236, 237, and 237C and revised the emission limits in Condition 4.1.2.8.4.
- 6. Added Condition 4.1.2.15 which allows for the production of the TMBX process. Dust collector 114 or 115 must be used by emission point 104.003A or 104.004B during periods when the Charge Hoppers are being operated. The Incinerator (009) and Incinerator Scrubber (010) shall be in operation for emission point 104.014 during all periods of the TMBX process. The number of

batches shall not exceed 100 per calendar year. The emission limitations are provided in Condition 4.1.2.15.3.

- 7. Added Condition 4.1.2.16 which allows for the production of the Nylon Washing process. The Incinerator (009) and Incinerator Scrubber (010) shall be in operation for emission point 104.014 during all periods of the Nylon Washing process. The number of batches shall not exceed 200 per calendar year. The emission limitations are provided in Condition 4.1.2.16.2.
- 8. Updated the page numbers in the Table of Contents.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

None

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: N/A Ending Date: N/A

All written comments should be addressed to the following individual and office:

Michael Egnor Engineer West Virginia Department of Environmental Protection Division of Air Quality 601 57th Street SE Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Michael Egnor West Virginia Department of Environmental Protection Division of Air Quality 601 57th Street SE Charleston, WV 25304

Phone: 304/926-0499 ext. 1208 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

On June 11, 2018 Himanshu Vyas from EPA provided the following comments:

- Thank you for providing the yellow markup in the draft/proposed permit for the changes that are included from the previous version of the operating permit. That is a good practice as it makes it easy to notice the changes being proposed.
- For main scrubber (003), as the changed condition requires its use for any reactor generating acid gases, the statement of basis should explain why there are no related changes to the scrubber's operation (pH, scrubber circulation flow rate, etc.), testing, monitoring, reporting, and recordkeeping. Perhaps the changes are minor and within the existing capabilities of the scrubber and its permit requirements; if so, that should be stated in the statement of basis, and if not, then provide these updated conditions in the permit.
 - Same set of comments as above, but for Dust Collector 114 or 115 as they relate to emission point 104.003A and 104.004B
 - O Same set of comments as above, but for Incinerator (009) and Incinerator Scrubber (010) as they relate to the Nylon Washing Process.

On June 12, 2018, the following response was sent to EPA from Michael Egnor, Title V Engineer: Carrie has us underline and highlight any changes that are made so that is easier for the company, the public, EPA, and us to see what is being changed in the Permit.

This facility is unique in the fact that they use the same equipment and control devices, but are always finding new venders to make new products, and thus making new scenarios which require NSR and Title V modifications. The control devices all have set parameters and operate under them no matter what product they are making. The only exception is a pH requirement in Condition 4.1.5.

Main scrubber 003 always operates with the pH level and scrubber flow rates given in Condition 4.1.5, control efficiency in Condition 4.1.7, maintenance requirements in 4.1.9, and continuous monitoring of the pH and flow rate in Condition 4.2.5.

Dust Collectors 114 and 115 operate under the 20% opacity limits of Conditions 4.1.13 and 4.1.14, monitor the production rates as given in Condition 4.2.1, visual emissions checks of 4.2.2, maintenance and inspection requirements of Condition 4.2.8, and records of emission estimates given in Condition 4.4.4.

Incinerator 009 operates and the temperature ranges and pressure differential given in Condition 4.1.3, maintenance requirements of 4.1.9, particulate matter emission limit of 4.1.10, opacity requirement of 4.1.11 and 4.1.12, odor requirement of 4.1.16, monitoring of production rate given in Condition 4.2.1, continuous monitoring of the operating temperature and minimum air flow rate given in Condition 4.2.3, visible emission checks of Condition 4.2.7, monthly production records given in Condition 4.4.3, and monthly emission estimates given in Condition 4.4.4.

Incinerator Scrubber 010 has scrubber pH and flow rates requirements in Condition 4.1.4, maintenance requirements in 4.1.9, monitoring of the production rates given in Condition 4.1.2, monitoring of the pH and flow rate given in Condition 4.2.4, production rates given in Condition 4.4.3, and monthly emission estimates given in Condition 4.4.4.

If you want, I can include the above in the statement of basis for this minor modification. This company is now on its 16th operating scenario and 6th minor modification since 2016 so they have kept me busy with updating their NSR and Title V Permits.

On July 3, 2018, the following response was received from Himanshu Vyas from EPA: Okay, I didn't realize how many modifications this has undergone. It seems okay to proceed.